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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/787,021	04/18/2001	Naoyuki Kobayashi	HST10112PUSA	8135

7590

07/16/2002

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EXAMINER

LEADER, WILLIAM T

ART UNIT

PAPER NUMBER

1741

DATE MAILED: 07/16/2002

9

Please find below and/or attached an Office communication concerning this application or proceeding.



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This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

OFFICE ACTION SUMMARY

☒ Responsive to communication(s) filed on 4/30/2002

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

- ☒ Claim(s) 1, 3-8 and 11-24 is/are pending in the application.
Of the above, claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1, 3-8 and 11-24 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
- ☐ received.
- ☐ received in Application No. (Series Code/Serial Number) _____
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

- ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- ☒ Notice of Reference Cited, PTO-892
- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☐ Interview Summary, PTO-413
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Notice of Informal Patent Application, PTO-152

--SEE OFFICE ACTION ON THE FOLLOWING PAGES--

Art Unit: 1741

Receipt of the response filed on April 30, 2002, with a certificate of mailing dated April 22, 2002, is acknowledged. Claims 9 and 10 have been canceled. Claims 1, 3 and 11 have been amended. Claims 1, 3-8 and 11-22 are pending.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim 3 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

As indicated in the previous office action, the limitations of claim 3 were the same as those of claim 9. Applicant has incorporated the limitations of claim 9 into independent claim 1. Thus, limitations which are the same of those recited in claim 3 have been incorporated into claim 1. Applicant has also amended claim 3 to be dependent on claim 1. However, since limitations which are the same of those recited in claim 3 are now in claim 1, claim 3 adds no further limitations, and is an improper dependent claim.

Claims 1, 3-8 and 11-21 are rejected under 35 U.S.C. 112, second paragraph, as

Art Unit: 1741

being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The limitations previously recited in dependent claims 9 and 10 have been incorporated into independent claim 1. Claim 1 now recites in the next-to-last subparagraph that the aqueous electrolyte solution has "at least one type of divalent or trivalent metal ions selected from a group consisting of magnesium, aluminum, calcium, manganese, chromium, iron, nickel, and copper". In the last subparagraph, independent claim 1 further recites that the aqueous electrolyte solution has "a concentration of calcium ions such that the molar ratio of calcium ions to zinc ions is from 0.1:1 to 2:1". The recitation of calcium in two separate subparagraphs of the same claim is confusing. The last subparagraph requires the presence of calcium. Is it applicant's intent that since, due to the limitation of the last subparagraph, calcium is present in the solution thereby satisfying the "at least one" condition of the next-to-last subparagraph, that none of the other divalent or trivalent metals ions recited in the next-to-last subparagraph is required? If none of these other metal ions is required, that is, if they are simply optional, then their recitation does not appear to affect the scope of the claim and the next-to-last paragraph could be deleted. If, however, it is applicant's intent that at least one of the divalent or trivalent metal ions other than calcium be included, then calcium should be deleted from the next-to-last paragraph.

Art Unit: 1741

Claims 22-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Sonoda et al for the reasons given in the previous office action and in view of the following comments.

Claims 1, 3-8 and 11-18 rejected under 35 U.S.C. 103(a) as being unpatentable over Sonoda et al and further in view of Shimakura et al and Witte for the reasons of record with respect to claim 10, now incorporated into claim 1, and in view of the following comments.

At page 4 of the Remarks, applicant notes that claim 22 calls for "at least one dissolved auxiliary acid other than phosphoric acid . . . ". Applicant goes on to quote the portion of Sonoda et al that discloses the concentration of zinc ion and phosphate ion. Applicant concludes that the invention as defined by claim 22 is not anticipated by Sonoda et al. This argument is not convincing. Applicant has not addressed lines 29-34 of column 2 of Sonoda et al which specifically disclose the incorporation of an oxidizing agent such as nitric acid. Nitric acid is applicant's preferred auxiliary acid. See page 7, lines 15-18 of the specification. As pointed out in the previous office action, the pH of the bath of Sonoda et al may be a highly acidic value of 1.0, and a bath with this high degree of acidity would be expected to correspond to the amount of auxiliary acid recited in claim 1.

Art Unit: 1741

At page 4 of the Remarks, applicant observes that claim 1 as amended incorporates the limitation of claims 9 and 10, which are lacking in Sonoda et al, and urges that claim 1 is not anticipated by Sonoda et al. Applicant's argument with respect to the anticipation of Claim 1 by Sonoda et al is persuasive, and this rejection is withdrawn. The rejection under 35 U.S.C. 103 previously applied to claim 10 is maintained, and now applied to claim 1 which incorporates the limitations of claim 10. As pointed out in the previous office action, while the Sonoda et al patent discloses the inclusion of zinc and calcium ions, it does not disclose the specific Ca:Zn ratio recited in claim 10. The Shimakura et al patent discloses that a phosphating solution may contain both zinc and calcium ions in amounts where the ratio overlaps the recited in claim 10. As indicated in the previous office action, it would have been obvious at the time the invention was made to have chosen the ratio of zinc to calcium in the process of Sonoda et al as recited by applicant because Shimakura et al shows that amounts of zinc and calcium producing such a ratio results in the formation of an effective conversion coating. It would have additionally been at least obvious to have chosen an amount of nitric acid in Sonoda et al to have resulted in a solution with a pH of 1 as disclosed. Applicant has not presented an argument with respect to the rejection of claim 10 under 35 U.S.C. 103.

Art Unit: 1741

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The PCT publication WO 98/09006 is directed to a process for electrochemical phosphating which includes the step of providing the workpiece with a lubricant after phosphating. The phosphating solution may contain zinc, phosphate, nitrate and calcium in amounts overlapping those recited by applicant.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Serial Number: 09/787,021


-7-

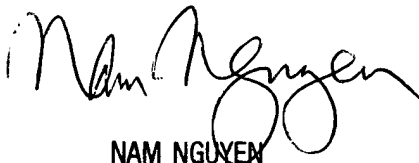
Art Unit: 1741

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William Leader, whose telephone number is (703) 308-2530. The examiner can normally be reached Mondays-Thursdays and every other Friday from 7:00 AM to 4:30 PM eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached at (703) 308-3322. The fax phone number for *official* after final faxes is (703) 872-9311. The fax phone number for all other *official* faxes is (703) 872-9310. Unofficial communications to the Examiner should be faxed to (703) 305-7719.

Any inquiry of a general nature or relating to the status of this application should be directed to the receptionist whose telephone number is (703) 308-0661.


William Leader:wtl
July 3, 2002


NAM NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700